IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inde application of

Confirmation No. 6142

Mitsuaki OSHIMA et al.

Atty Docket 2000 1388

Serial No. 09/677,421

Group Art Unit 2634

Filed October 5, 2000

Examiner A. Le

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Technology Center 2600

PATENT OFFICE FEE TRANSMITTAL FORM

Assistant Commissioner for Patents, Washington, DC 20231

COMMUNICATION SYSTEM

THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEES FOR THIS PAPER TO DEPOSIT

ACCOUNT NO. 23-0975

Sir:

Attached hereto is a check in the amount of \$194.00 to cover Patent Office fees relating to filing the following attached papers:

Additional Claims Fee Transmittal Letter

Terminal Disclaimer\$110.00

A duplicate copy of this paper is being submitted for use in the Accounting Division, Office of Finance.

The Commissioner is authorized to charge any deficiency or to credit any overpayment associated with this communication to Deposit Account No. 23-0975, with the EXCEPTION of deficiencies in fees for multiple dependent claims in new applications.

Respectfully submitted,

Mitsuaki OSHIMA et al.

istration No. 41,471

Attorney for Patentees

JRF/fs

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July 26, 2002

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AMENDMENT

THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEES FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975

Assistant Commissioner for Patents, Washington, D.C.

Sir:

In response to the Office Action of May 17, 2002, please amend the above-identified U.S. patent application as follows:

IN THE CLAIMS:

Please cancel claims 13-17 without prejudice or disclaimer to the subject matter therein.

Also, please add new claims 18-23 as follows.

18. A signal transmission apparatus comprising:

a modulator operable to assign each of a first data stream and a second data stream to a respective constellation in a vector space diagram to produce modulated signals wherein the number of signal points of the constellation for the first data stream is different from the number of signal points of the constellation for the second data stream; and

a transmitter operable to transmit the modulated signals,

wherein the first data stream has data for demodulation including the number of signal points of the constellation for the second data stream.

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